



**Prevention
Abstracts
Current Research
on Prevention Issues
Spring 1993**

144150
OS/771

SOUTHEAST
REGIONAL ◦ CENTER ◦ FOR
DRUG-FREE
SCHOOLS ◦ AND ◦ COMMUNITIES

144150

Prevention Abstracts

Current Research on Prevention Issues

Spring 1993

Mary Jane Aboud, Editor

Southeast Regional Center for Drug-Free Schools and Communities

**Spencerian Office Plaza
University of Louisville
Louisville, KY 40292
(502) 588-0052
Toll Free: 1-800-621-SERC
FAX: (502) 588-1782**

144150

**U.S. Department of Justice
National Institute of Justice**

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by
Public Domain

U.S. Department of Education

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

Prevention Abstracts Spring 1993

These abstracts are summaries of published research articles appearing in various scholarly journals. The original articles are referenced at the beginning of the abstracts.

Any opinions, suggestions, or conclusions cited are summarized from the original articles, and do not necessarily reflect the views of the Southeast Regional Center or the U.S. Department of Education.

Thanks to the Southeast Regional Center's Evaluation and Dissemination staff for their work in preparing this issue of *Prevention Abstracts*.

Nancy J. Cunningham, Ph.D., Director
Patricia Miller, Associate Director for Evaluation and Dissemination

The contents of this publication were developed under a cooperative agreement with the U.S. Department of Education. However, the contents do not necessarily represent the policy of the Department of Education, and endorsement of the contents by the federal government should not be assumed.

Table of Contents

Characteristics of steroid users in an adolescent school population. Adlar, E. M., & Smart, R. G.	1
Impact evaluation of Drug Abuse Resistance Education (DARE). Becker, H. K., Agopian, M. W., & Yeh, S.	2
Characteristics of smokeless tobacco use among high school football players as related to type of smokeless tobacco and period of use. Creath, C. J., Wright, J. T., & Wisniewski, J. F.	3
Academically successful drug users: An oxymoron? Evans, W. P., & Skager, R.	4
Risk factors for drug use in rural adolescents. Farrell, A. D., Anchors, D. M., Danish, S. J., & Howard, C. W.	5
School-based substance abuse prevention: A review of the state of the art in curriculum, 1980 - 1990. Hansen, W. B.	7
Environmental and personality differences between children of alcoholics and their peers. Havey, J. M., & Dodd, D. K.	8
Knowledge and attitudes toward alcohol and tobacco use among elementary children. Huetteman, J. D., Sarvela, P. D., & Benson, R.	9
Children of alcoholics in the classroom: A survey of teacher perceptions and training needs. Knight, S. M., Vail-Smith, K., & Barnes, A. M.	10
Mobilizing communities to reduce risks for drug abuse: Lessons on using research to guide prevention practice. Manger, T. H., Hawkins, J. D., Haggerty, K. P., & Catalano, R. F.	11
Parental substance abuse treatment and adolescent problems. Orenstein, A., Davis, R. B., & Wolfe, H.	12
Perceived physical attractiveness and frequency of substance use among male and female adolescents. Page, R. M.	13
The relationship between parenting styles and young adults' self-concepts and evaluations of parents. Parish, T. S., & McCluskey, J. J.	15

Academic intervention for at risk students with substance misusing backgrounds.
Shannon, D. M., & James, F. R. 16

Relationship between peer status and health behaviors.
Terre, L., Drabman, R. S., Meydrech, E. F., & Hsu, H. S. H. 17

A creative drama prevention program for easing early adolescents' adjustment to school transitions.
Walsh-Bowers, R. T. 18

Drug abuse and eating disorders: Prevention implications.
Watts, W. D., & Ellis, A. M. 20

About the Center 21

Area Field Coordinators 23

Adlar, E. M., & Smart, R. G. (1992). Characteristics of steroid users in an adolescent school population. *Journal of Alcohol and Drug Education, 38(1), 43-49.*

While knowledge of the health risks of steroid use has increased, there has been little research on prevalence of use and characteristics of users, especially among adolescents. The purpose of this study was to examine the rates of steroid use among students in Ontario, Canada, along with their demographic characteristics, sports they engage in, perceived health status, and their use of other drugs.

Data for the study came from the 1989 Ontario Student Drug Use Survey, given to samples of public and parochial school students in grades 7, 9, 11, and 13 in the spring. The number of students interviewed was 3,892. To determine the number of students using performance-enhancing drugs, interviewers asked the question, "Have you ever used any substance within the following drug categories to increase your performance in some sport or activity and/or to change your physical appearance?" There were four yes/no response categories: stimulants (e.g. amphetamines, cocaine), caffeine, relaxants (e.g. alcohol, tranquilizers, betablockers), and steroids (e.g. testosterone and other androgens, growth hormones, durabolin, etc.). Students were also questioned about participation in six categories of sports over the last twelve months: court sports such as tennis; track and field; football; other field sports such as baseball or soccer; weightlifting or bodybuilding; and "other" sports.

Of the students interviewed, 42 (1.1%) reported using steroids over the past year. These students were significantly more likely to use the other three categories

of performance-enhancing drugs than were non-steroid users, were more likely to be male, and on average were older than non-steroid users. All steroid users participated in at least one sport. The only activity that differed significantly between steroid users and nonusers was weightlifting/bodybuilding, engaged in by 72.4% of users vs. 38.8% of nonusers. Participation in bodybuilding only was higher for steroid users than nonusers (8.8% vs. 1.6%). Steroid users reported lower grades in school, with 2.8% of users reporting A's, compared to 28.1% of nonusers, and 5.2% reporting failing grades, compared to 0.2% of nonusers. Users and nonusers were equally likely to report excellent health (35.3% vs. 32.3%), but users were more likely to rate their health as poor (4.8% vs. 0.4%). Steroid users were significantly more likely to use other drugs and engage in multiple drug use. The significant predictors of steroid use were being male, participating in bodybuilding, and using a greater number of drugs.

The authors note differences in their findings and similar epidemiological studies conducted in the United States in 1989, which showed the rate of steroid use to be 6.6% of males in grade 12. Also, 35.2% of the users in the American studies did not participate in any sport, whereas all students reporting use in this study participated in at least one sport, a difference which may be due to differences in definitions of sports participation. They stress the need for further research into the epidemiology, etiology, and use patterns of steroid users.

Becker, H. K., Agopian, M. W., & Yeh, S. (1992). Impact evaluation of Drug Abuse Resistance Education (DARE). *Journal of Drug Education, 22*, 283-291.

The Drug Abuse Resistance Education (DARE) program began in 1983 as a joint effort of the Los Angeles Police Department and the Los Angeles Unified School District. Normally taught by a police officer during the exit grade from elementary to middle or junior high school, DARE is designed to help students resist peer pressure to use alcohol and other drugs. It consists of seventeen weekly lessons of approximately fifty minutes each, concluding with an assembly and graduation. The purpose of this study was to examine the impact of DARE on fifth-graders in the Long Beach (California) Unified School District.

Approximately 3,000 students participated in the study during the fall 1989 semester. About half the students received DARE during the semester (experimental group; n=1,913 pretest; n=1,884 posttest). The others were used as the control group (n=1,196 pretest; n=994 posttest). Pretest and posttest measures for both groups were collected with a 34-item self-report instrument. The fifth-grade students represented a diversity of racial and ethnic backgrounds and ranged from nine to twelve years of age, with most between the ages of ten and eleven. Variables measured included family relationships, self-esteem, peer group stress, knowledge of drugs, demographics (gender, race, and age), and drug use behavior for nine categories of drugs.

Results showed minimal substance use by fifth graders. For those who did use substances, there were significant associations between drug use and gender (boys were more likely to use drugs); knowledge about drugs (the higher the knowledge level, the less likely to use drugs); family relationships (the closer the family ties, the less likely to use drugs); self-esteem (the higher the self-esteem, the less likely to use drugs); peer group stress (the greater the peer pressure, the more likely to use drugs); and age (the older, the more likely to use drugs). Within the control group, minority students had a higher tendency to use drugs.

DARE was most effective in *maintaining* current levels of substance use. Except for cigarette use, which went down slightly for the experimental group, substance use increased for both groups, with the control group showing greater increases. The DARE group did report an increase in knowledge and ability to resist peer pressure to use drugs, although such peer pressure was rare among this fifth-grade group.

With increases in alcohol use for both the experimental and control groups, the authors suggest that instructional reinforcement for DARE be provided at the sixth and seventh grades, and that DARE lessons be enhanced to include family and community involvement.

Creath, C. J., Wright, J. T., & Wisniewski, J. F. (1992). Characteristics of smokeless tobacco use among high school football players as related to type of smokeless tobacco and period of use. *Journal of Drug Education, 22, 69-85.*

The use of smokeless tobacco is associated with oral pathology, and continues to rise among adolescents. Research on smokeless tobacco has generally compared users to nonusers and has usually combined users of chewing tobacco (chew) with users of snuff (dip). The small amount of research which has looked at differences between the two types of users seems to indicate differences in terms of reason for initiation, characteristics of use, and other drug use. The purpose of this study was to investigate possible differences in smokeless tobacco use by adolescent male athletes related to type of smokeless tobacco used and duration of use.

A total of 1,116 high school football players were surveyed as part of a football preseason medical and dental screening at The Children's Hospital of Alabama. Thirty-three (33) schools were represented, two-thirds of which were urban or suburban and the rest rural. Several schools were from economically advantaged districts, while the majority were from middle to lower socioeconomic areas. Thirty multiple-choice and four open-ended questions asked about current and past use of smokeless tobacco, alcohol, and cigarettes; perceptions of smokeless tobacco use, habits, and health effects; family members' use of smokeless tobacco; reasons for continuing use; suspected harmful effects; and academic performance.

Looking at combined data for the total sample of 1,116 athletes, 335 (30.2%) were experimenters (having tried smokeless tobacco but no longer using at the time of the study) and 54 (4.8%) were current users (having used for more than six months and using at the time of the study). Blacks comprised 50.7% of the sample and whites 48.8%, but only 6.9% of blacks were experimenters and 0.2% current users, compared to 54.3% of whites being experimenters and 9.7% current users. Over three-fourths of those who had tried smokeless tobacco had done so by the age of 14. Factors associated with use included cigarette use, family smokeless tobacco users, alcohol use, race

(white), and the use of cigars and/or pipes. Alcohol users tended to use more smokeless tobacco for a greater number of years than did non-alcohol users. Almost half (48%) of all smokeless tobacco users reported use at home, 23% while playing sports, and 11% with friends.

In order to examine factors associated with specific types of smokeless tobacco use, data was divided into three categories. Of the smokeless tobacco-using sample, 199 used snuff (59.4%), 53 used chewing tobacco (15.8%), and 83 used both (24.8%). Dip users were more likely to start because of friends who use, while chewers were more likely to begin use due to family members who use, and were least likely to use at school or work. Users of both used more hours per day, drank more alcohol, smoked more cigarettes, and were most likely to use cigars and/or pipes. They were more likely to initiate use out of general curiosity and to continue use because of taste, relaxation, and general enjoyment.

Analysis of differences related to duration of use showed that the longer smokeless tobacco was used, the more likely users would use both dip and chew, and use them at school and at work. As duration increased, users used more hours per day and were less likely to believe there were harmful effects. They were more likely to use cigars, pipes, and alcohol, and smoked greater quantities of cigarettes.

Implications of the findings for prevention and intervention programs for adolescents include the need to address the very young age of initial use, the strong influence of parental/family attitudes and use, peer influences, addiction problems, and the progressive use of both smokeless tobacco products as well as increased alcohol and cigarette use by long-term users. Differences among categories of users suggest further investigations of smokeless tobacco use should differentiate among chewers, dippers, and users of both.

Evans, W. P., & Skager, R. (1992). Academically successful drug users: An oxymoron? *Journal of Drug Education*, 22, 353-365.

Although research supports the common wisdom that adolescent drug use and academic success do not go hand in hand, drug use measures do not account for a significant proportion of the variance in achievement in these studies. The present study looked at the extent of drug use among two samples of academically successful students in order to identify mediating factors that might help some drug-using students avoid negative academic consequences.

Two groups of ninth and eleventh-grade California students were surveyed. The first survey sampled 2,288 ninth-graders and 2,653 eleventh-graders from 44 schools statewide. This sample had a slightly higher proportion of girls at both grade levels, and was approximately 3% American Indian, 12% Asian-American, 10% African-American, 27% Latino, 42% Anglo, and 6% Other. Two years later, a slightly different questionnaire was administered to 1,043 ninth-graders and 862 eleventh-graders from a large suburban county. These students were fairly evenly distributed by gender, and were 70% Anglo.

Student drug use was measured by responses to how often in the past six months they had used each of 17 substances. Other survey items measured acting-out behaviors, emotional adjustment, academic involvement, and life satisfaction. For the state survey academic involvement was a composite variable made up of self-reported GPA, interest in school subjects, and effort put into school subjects. The county survey included only the self-reported GPA for this measure.

Three groups of academically successful students, divided on level of drug involvement, were compared. Students from the statewide sample were determined academically successful if their score on the composite Academic Involvement variable was at or above one standard deviation above the mean. This included 28.3% of ninth-graders and 22.6% of eleventh-graders. Since only self-reported GPA was available for the county sample, a more conservative selection process was used, including only those students reporting an "A" average—13.1% of ninth-graders and 11.6% of

eleventh-graders. The academically successful students were then classified as high-risk users (HRU), conventional users (CON), or abstainers (ABS).

Results showed increased acting-out behaviors, increased leniency of perceived peer and parental drug attitudes, and increased number of known adults who use drugs as level of drug involvement increased. There were no significant differences among successful eleventh-grade groups for educational aspirations, parent education level, or emotional stability. Eleventh-grade HRUs reported the most satisfaction with their lives and conventional users the least (measured on county sample only).

Based on the study's findings of some heavy drug use at all levels of academic performance, the authors caution educators against relying on low school involvement as one of the most salient indicators of student drug use. They suggest that negative effects of drug use on academic performance may be counterbalanced by such factors as high educational aspirations, high parent education level, and emotional stability. Just as certain protective factors insulate some youth from drug involvement, there may be certain attitudes and skills which help limit the negative consequences of drug use for some adolescents. The authors call for further research into how abstainers (28.2% of statewide and 19.4% of county eleventh-graders) resist behaviors practiced by the majority of their peers. They suggest the possibility that the same characteristics which protect academically successful abstainers from drug involvement might restrict their adaptability in other areas, since these students reported the least participation in extracurricular activities, as well as lower life satisfaction than the high-risk users.

The authors acknowledge the limitations of the study's correlational design, and call for longitudinal studies showing how adolescent drug use affects achievement, aspirations, and life adjustment over time.

**Farrell, A. D., Anchors, D. M., Danish, S. J., & Howard, C. W. (1992).
Risk factors for drug use in rural adolescents. *Journal of Drug
Education, 22, 313-328.***

This study investigated risk factors associated with alcohol and other drug (AOD) use among rural adolescents, using risk factors previously identified by the authors as significantly related to AOD use by urban youth.

Subjects were 235 seventh-graders from a middle school in a rural county in the southeast in March 1990. The sample was evenly divided by gender, and 41.9% were black, 49.4% were white, and 6.4% identified themselves as Native American. However, because there is a very small number of Native Americans in this county, the authors assumed the students misunderstood this item, and coded their responses as missing data for analyses of ethnic differences.

The authors' earlier study with urban seventh-graders used a battery of questionnaires and school records to identify twenty risk factors related to AOD use. For the present study the same battery was used, except for the Adolescent Coping Orientation for Problem Experiences Scale (on which three risk factors were based). Also, school records were not available for this study, eliminating two more risk factors and leaving a total of fifteen of the 20 previously identified risk factors for study. Coded as present or absent, these risk factors were: home alone after school, friends who approve of drug use, friends who use drugs, know adults who use drugs, feel pressure to use drugs, history of alcohol use, history of cigarette use, high delinquent behavior, expect to get in trouble with the police, expect to use drugs, perceive high student drug use, history of trouble with the police, high emotional distress, low emotional restraint, and do not expect to graduate from high school. Based on findings from the earlier study, the first ten of these risk factors were used to calculate a risk factor index.

Participants were asked to indicate whether they had ever used each of 15 specific drugs or categories of drugs. They also reported how often during the past 30 days they had used each drug or category of drugs, and responses were used to calculate the Gateway Drug Use Scale (the mean reported frequency of smoking cigarettes, drinking beer, drinking wine, drinking liquor, getting drunk, and using marijuana) and the Other Illicit Drug Use Scale (the mean reported frequency of using inhalants, depressants, hallucino-

gens, stimulants, cocaine or crack, narcotics, injected drugs, and other drugs). Students were classified as users of a drug if they responded either that they had ever used that drug or reported any frequency of use within the last 30 days.

The prevalence of use and frequent use (three to five times or more in the past 30 days) for each drug was analyzed by gender and ethnicity. Boys showed a significantly higher prevalence of both use and frequent use of chewing tobacco and hard liquor, and a slightly higher frequency of gateway drug use. White students indicated a significantly higher prevalence of chewing tobacco use than did black students. No other significant ethnic differences were found.

The relationship between each of the 15 risk factors and use of cigarettes, chewing tobacco, beer and wine, hard liquor, marijuana, and other illicit drugs was examined. Only one risk factor, high emotional distress, was not significantly related to prevalence rates for at least one drug. While only two risk factors were significantly related to beer/wine use (friends who use drugs and history of cigarette use), 12 risk factors were associated with marijuana use—history of alcohol use, friends who use drugs, history of cigarette use, history of trouble with police, high delinquent behavior, low emotional restraint, expect to use drugs, feel pressure to use drugs, don't expect to graduate, expect trouble with police, perceive high student drug use, and know adults who use drugs. Having friends who approve of drugs and being home alone after school were not associated with marijuana use.

Scores on the risk factor index ranged from zero to 10 (number of risk factors present). The mean number of risk factors present for this sample was 2.4, with girls having slightly less than boys. There were no significant ethnic differences in total number of risk factors. The risk factor index was significantly related to prevalence for each of the five categories of drug use and drug use within the past 30 days.

Results support recent studies showing that rural adolescents are not immune to the problems of drug use. Drug use prevalence within this rural sample was equal to or greater than the prevalence among urban youth studied previously by the authors. The lack of

significant differences between ethnic groups (except for chewing tobacco) need to be replicated in other rural samples before any conclusions can be drawn, since most studies show lower reported use among black youth.

The authors suggest that the risk factors identified here may contribute to the understanding of those working with rural youth. However, since not all youth with a high risk factor index are involved in drug use, they call for a cautious use of the risk factor approach. They also stress the heterogeneous nature of rural America when generalizing findings from any one rural sample to other rural communities. The findings underscore the need for increased research and prevention efforts for rural communities.

Hansen, W. B. (1992). School-based substance abuse prevention: A review of the state of the art in curriculum, 1980-1990. *Health Education Research*, 7, 403-430.

Prevention practitioners are frequently faced with a serious dilemma when attempting to select or design effective prevention programs. While looking for theoretical bases for their selections, they want to use programs that work. The dilemma stems from a lack of consistent program results which can be tied to various theoretical approaches. To add clarity and provide some pragmatic guidelines for practitioners, the author reviewed prevention studies from the 1980s with the goal of "summariz(ing) what we know about what is effective in achieving substance abuse prevention," while proceeding from the premise that the "identification of consistency of findings across studies provides the key to finding promising approaches to prevention." The review considered only articles published or distributed since 1980 which specifically target late primary and secondary educational settings, and excluded programs targeting only tobacco outcomes.

Much of the article described procedural considerations. The first was determining standards for program success or failure while simultaneously avoiding "critical reviewer bias" (i.e., recognizing that most prevention research suffers from methodological flaws), and "inside reviewer bias" (i.e., the research and experience base of the reviewer). The author handled this by establishing *a priori* criteria that included examining studies for potential selection bias, possible rival hypotheses that threaten internal reliability, and sufficiently powerful analytical methods to detect actual differences produced by the treatment (i.e., that minimize possible Type II error).

The second issue was determining a conceptual and theoretical framework for evaluating the effectiveness of prevention efforts. Rejecting traditional classification schemes, the author looked instead at "identifying the *building block theoretical concepts* (author's emphasis) used by researchers in describing their programs." He identified 12 distinct types of program content linked, in theory, to the mediating processes which lead to the behavioral effects sought in prevention—reduced or eliminated ATOD use. The 12 identified are information; decision making; pledges; values clarification; goal setting; stress management; self-esteem; resistance skills training; life skills training; norm setting; assistance; and alternatives. All the

programs reviewed were examined and classified according to presence or absence of each of these components. A cluster analysis of the results of this classification was used to identify groups of programs to further simplify the analysis. Six groups were identified: Information/values clarification (programs that include a primary emphasis on knowledge or address values clarification); Affective education (educational programs that include multiple affective program strategies such as decision making, values clarification, stress management and self-esteem); Social influence (primary purpose is to teach students about peer and other social pressures and to develop resistance skills); Comprehensive (including multiple prevention strategies); Alternatives (programs that stress life skills training and alternatives); and Incomplete (two programs that shared information and norm setting). Each study was analyzed and coded on three variables: success, selection bias, and power.

When examining only program success, the program group with the highest proportion of positive findings was Social Influence programs (51%), followed very closely by Comprehensive programs (50%). Information/Values Clarification programs had mixed outcomes, and Affective Education programs had neutral results. However, when selection bias and low power were used to eliminate questionable studies, the results were slightly different. Information/Values Clarification programs were predominantly neutral; Affective Education programs were more likely to be positive; Social Influence programs had predominantly positive results; and Comprehensive programs resulted in the strongest set of positive outcomes.

In conclusion, the author cited some general themes that emerge from successful programs. For example, the most promising single component of effective prevention programs appears to be social influences. Affective programs may increase the efficacy of social influence programs, and information is not sufficient for prevention effectiveness. Of most significance, however, is his conclusion that "the most promising strategy appears to be a comprehensive one including multiple components representing a wide variety of approaches to prevention."

Havey, J. M., & Dodd, D. K. (1992). Environmental and personality differences between children of alcoholics and their peers. *Journal of Drug Education, 22, 215-222.*

Many studies of children of alcoholics (COAs) have used clinical samples, which may not be representative of the population at large and shed no light on why some COAs survive their home environment with no serious dysfunction. This study looked at the degree to which environmental stressors and measures of depression and anxiety differentiated between nonclinical, adolescent COAs and their peers from nonalcoholic homes (CONAs).

The sample consisted of 231 high school sophomores and juniors (113 females, 118 males) from a public school in a small midwestern city, predominantly white and middle to upper-middle class. Participants completed an eleven-item questionnaire which gathered demographic information and assessed the home environment. Students were identified as COAs or CONAs by their response to the question, "Have you ever felt that one or both of your (biological) parents may have or may have had an alcohol abuse problem?" Two self-report instruments, the Reynolds Adolescent Depression Scale (RADs) and the Revised Children's Manifest Anxiety Scale (RCMAS) measured depression and anxiety, internalizing disorders identified as risk factors for COAs in clinical and empirical studies.

Twenty-six percent (26%) of the students identified themselves as COAs, with a significantly greater proportion of females (33%) doing so than males (19%). Multivariate analyses were done to explore the relationship of the predictor variables (environmental stressors, depression, and anxiety) to group membership (COA vs. CONA). Among males, COAs were less likely to be living with both natural parents, scored higher on Social Concerns/Concentration (a RCMAS subscale), and scored lower on Worry/Oversensitivity (another RCMAS subscale). Among females, COAs were more likely to have divorced parents, more likely to report physical abuse in the home, less likely to observe family traditions and celebrations, and scored higher on Social Concerns/Concentration. For the

total sample, COAs were less than half as likely to live with both natural parents (30% vs. 73%), more than twice as likely to come from divorced homes (57% vs. 23%), and at least three times as likely to report physical abuse (27% vs. 9%) and sexual abuse (17% vs. 5%) within the home. Although the COAs did score significantly higher on depression and anxiety, the differences were small relative to the differences on the environmental measures, and the scores fell well within the normal ranges for the RADs and RCMAS.

The fact that a significantly higher proportion of females reported a parental drinking problem suggests the girls had a broader definition of "drinking problem" and/or were more aware of parents' behavior. This points out the difficulty in using a single self-report measure to classify COAs. The stressful home environments reported by COAs in this sample correspond to the environmental stressors reported by COAs referred for therapy or legal difficulties. The authors suggest further research on the relationship between parental alcoholism, home stressors, and the development of future problems. They also suggest more research on similarities and differences in developmental outcomes between COAs and other children raised in stressful environments, such as children of divorce and abused children. Future studies also need to address gender differences in children's perceptions of and responses to parental alcoholism.

There are several implications for prevention and intervention efforts. That most of the COAs' scores on depression and anxiety fell within the normal range suggests a resiliency among COAs that might make an educational rather than therapeutic approach more appropriate for prevention efforts. If family variables distinguish best between COAs and CONAs, programs should focus on family interventions, and broaden their focus to include children from other stressful environments.

Huetteman, J. D., Sarvela, P. D., & Benson, R. (1992). Knowledge and attitudes toward alcohol and tobacco use among elementary children. *Journal of Alcohol and Drug Education*, 38(1), 61-72.

Previous studies have shown significant shifts in positive attitudes and use of alcohol between fifth and sixth grades. This study was designed to determine level of knowledge and attitudes of grade school children toward alcohol and tobacco use.

The study surveyed 573 K-8 children from a rural/small town public school system in Illinois during the 1987-88 school year. To ensure all possible responses to questions would be considered, the authors developed a seven-item open-ended questionnaire which asked students to indicate who they would ask if they had a question about alcohol or tobacco, what they would do if someone offered them a can of beer or a cigarette, why people smoke or drink, and how alcohol and tobacco harm the body. Classroom teachers collected the data through individual interviews with the K-3 students, and by reading the questions to grades 4-8 classes and allowing students to write their own responses. Results were compiled with tabulations of similar responses, and examined for clusters, trends, and common answers.

For sources of information about alcohol or tobacco, parents and teachers were overwhelmingly the top choices at all grade levels. Across grade levels, students indicated good resistance skills in response to an offer of beer or a cigarette, but there was a noticeable shift in positive attitudes and acceptance of an offer starting in fifth grade. Most K-3 students were unable to indicate the harm caused by alcohol and tobacco. Students across all grade levels gave good answers to why people might smoke or drink.

With the noticeable shift in attitudes and likelihood of accepting alcohol or cigarettes in fifth grade, along with a shift in the extent of peer influence, the authors recommend a concerted educational effort to address social and resistance skills. They also suggest including information about the immediate and long-term effects of alcohol and tobacco use in school-based programs. The authors concur with those who call for educational prevention efforts to target not only individual students but school policies at the local, district, and state levels, particularly in relation to tobacco use.

Knight, S. M., Vail-Smith, K., & Barnes, A. M. (1992). Children of alcoholics in the classroom: A survey of teacher perceptions and training needs. *Journal of School Health*, 62, 367-371.

An estimated four to six children in a classroom of 25 students are children of alcoholics (COAs). These children have special needs including both education and intervention, and teachers are being called upon to meet those needs. However, many educators may be uninformed about the problematic effects of parental alcoholism on children and ill-prepared to deal with these problems in their students. This study examined elementary and middle school teachers' perceptions of their roles and responsibilities in helping COAs, their needs for additional training, and their perceptions about school-based resources for COAs.

In June 1991, 502 K-8 teachers from 25 schools in eastern North Carolina completed a survey developed for this study. The Children of Alcoholics Teacher Perception Survey included five items pertaining to ethnicity, gender, age, and teaching experience and 14 items assessing the teachers' perceptions about COAs, including: (1) incidence of COAs in their classrooms; (2) presence of behavioral and learning problems in the classroom related to parental drinking; (3) school-based resources for COAs; (4) roles and responsibilities of teachers to help COAs; and (5) need for training related to COAs. Five items addressed major misperceptions previously identified as obstacles to helping professionals providing effective assistance to COAs: (1) few children are affected by parental alcoholism; (2) alcoholism is the parent's problem, not the child's; (3) assistance to COAs is not a helping professional's job; (4) COAs will ask for the help they need; and (5) parental alcoholism is a personal matter, not to be addressed openly.

Almost 95% of the 502 respondents were female. About two thirds ranged in age from 31-50, were white, and had been teaching for 12 or more years. Most respondents agreed teachers should be able to identify COAs, but perceptions of incidence of COAs in their classrooms varied widely, ranging from 0% to 80%. Most teachers agreed that COAs were likely to have behavior and learning problems at school. Most disagreed that COAs would ask for the help they need, that alcoholism is the parent's problem, that it is not their job to offer assistance, and that they would not explore the issue with a child in their class.

Teachers who agreed that few children in their classes were affected by parental alcoholism were less likely to agree COAs were at greater risk for learning problems, more likely to agree COAs would ask for the help they need, more likely to agree they would not explore the issue of parental alcoholism with a student, and more likely to agree it was not their job to offer assistance to COAs. There was not a significant correlation between teacher age or number of years teaching and perception of low COA incidence.

The school-based resource most commonly indicated by teachers was a school counselor (68.6%), followed by reading materials in the library (31.4%). Only 11% indicated availability of a student support group, and 6.3% had a student assistance program at their school. Twenty-two percent (22%) of the teachers indicated their school had none of the resources, 7% indicated "Other," and a few noted that although they had checked an option, little help was really available for COAs.

Less than 17% of the respondents indicated they had attended a workshop, conference, or presentation; read a book; or taken an academic course related to COAs in the last two years. About one-fourth believed they were adequately informed about the needs and problems of COAs, while over half indicated they were not. Almost 75% indicated an interest in attending a workshop about COAs. Those who perceived a low incidence of COAs in their classroom showed less interest in attending a workshop and were more likely to disagree that the problems of parental alcoholism called for a special inservice program for teachers.

Although the authors suggest caution in generalizing these findings from North Carolina to all educators, the data suggest most elementary and middle school teachers are willing to help COAs in their classrooms but feel inadequately informed about their problems and needs. The findings support the need for more training to increase knowledge and awareness about COAs. This may be particularly helpful for those teachers who perceive a low incidence of COAs in their classroom, since their responses suggested the existence of barriers to effective assistance to COAs.

Manger, T. H., Hawkins, J. D., Haggerty, K. P., & Catalano, R. F. (1992). Mobilizing communities to reduce risks for drug abuse: Lessons on using research to guide prevention practice. *Journal of Primary Prevention, 13*, 3-22.

Addressing risk factors in multiple domains of adolescent development (family, school, peer group, and community) is a drug abuse prevention strategy supported by research. Many researchers and program planners have found risk-focused efforts are effective in promoting a comprehensive, community-wide approach to addressing drug abuse. This article describes the two-year pilot phase of TOGETHER! Communities for Drug Free Youth ("TOGETHER!"), a community-based prevention program that draws on risk factor research. The TOGETHER! pilot project targeted 28 communities throughout the state of Washington and included training and technical assistance in developing a comprehensive plan to reduce drug abuse risks in communities.

TOGETHER! community planning teams were provided a risk-focused planning framework, called the social development strategy. The strategy states that when a social unit (family, school, peer groups) offers a young person opportunities for active involvement, the skills to participate successfully, and a consistent system of rewards for successful involvement and moderate, consistent punishment for misbehavior, positive bonds of attachment, commitment, and belief will be forged between the young person and the social unit. Drug abuse prevention programs using the social development strategy create or enhance these conditions in youth.

The community mobilization process implemented for TOGETHER! consisted of four phases: (a) community recruitment and key leader orientation, (b) team formation, (c) team training, and (d) implementation of the planning process. Recruitment efforts resulted in the identification of 43 communities whose key leaders were interested in participating in the project. These leaders were invited to an orientation, which consisted of a project overview, explanation of risk-focused prevention approaches, description of the social development strategy, and specifics on building community planning teams.

Using basic guidelines developed by TOGETHER! staff, the key leaders recruited members to serve on the planning team. Each team was also assigned one TOGETHER! staff member who served as a consultant. Each community was invited to send nine team

members to training, where they were instructed in a planning process which included how to identify the communities' priority risk factors, develop a preliminary framework of goals and objectives, and keep the team moving after training. After the initial training event, a second two-day training was held to provide communities an opportunity to share their progress and receive additional information on grantwriting, involving parents in prevention, addressing public policy, and mobilizing youth as resources.

Outcome assessment for the project focused on teams' knowledge regarding the social development strategy and the extent to which they implemented activities during the pilot phase that were either risk-focused or used the social development strategy. Pre- and posttests were administered at the second team training to assess knowledge of the social development strategy, using nine items rated on a scale of 1 (very important) to 5 (not at all important). Ratings on two items changed significantly, showing greater knowledge of the social development strategy. These were developing youth's interpersonal and communication skills, and providing rewards and recognition for involvement in positive drug-free activities. Assessment of team activities and their use of the social development strategy or risk-focused planning showed that three teams had not implemented any activities, and the remaining teams had implemented such activities as parenting programs for drug abuse prevention (seven teams), lobbying for school-based programs (11 teams), and advocating or lobbying for policy change (five teams).

The authors provide two case studies for a richer source of data regarding the potential of the team planning process, and conclude that large numbers of communities can benefit from using a risk-focused approach to drug abuse prevention planning. The teams trained by TOGETHER! responded well to the social development strategy, although team turnover and loss of specificity in disseminating risk-focused prevention were ongoing issues. The authors recommend providing greater direction and training with regard to accountability and organizational development, and that technical assistance take into account such issues as team turnover and new member training.

Orenstein, A., Davis, R. B., & Wolfe, H. (1993). Parental substance abuse treatment and adolescent problems. *Journal of Alcohol and Drug Education*, 38(2), 50-61.

Research on children of alcoholics (COAs) that has drawn samples from treatment populations has generally shown these children to be experiencing a variety of problems. Recently researchers have moved toward sampling COAs from a broader community base. These studies have not found differences on a wide variety of variables, although some differences do appear. However, these vary from study to study, and because studies are based on different measures of family alcoholism, it is difficult to compare them. This study used two different measures of family alcoholism on the same sample of youth to determine whether either measure identifies a group of adolescents markedly different from their peers.

The measures, both based on the adolescents' responses, were parental treatment for alcohol or other drug problems and distress about parental drinking. Subjects were 11th graders from a predominantly Irish and Italian working class city near Boston. A questionnaire was distributed in the fall of 1990, and 277 students, or 82% of the grade level, returned them. The parental treatment measure was based on two questions: "Have the parents or stepparents you live with ever been treated for drinking problems or drug use?" and "Have the parents or stepparents you live with ever attended an AA or Al-Anon meeting?" The student distress measure used four items: (1) Do you ever wish that one or both of the parents (or the stepparents) you live with would drink less? (2) Has your parents' (or stepparents') drinking ever caused you any problems? (3) Have you ever felt scared or angry because one of your parents (or stepparents) was not able to stop drinking? (4) Do you ever worry that one of your parents (or stepparents) might get sick because they drink? Two scales measured student substance use problems. The Personal Experience Screen Questionnaire (PESQ) focused on the contexts in which alcohol and drugs are used, and the Rutgers Alcohol Problem Index (RAPI), modified to include drug use, focused on the consequences of substance use. Five items on the PESQ measured social desirability of responses.

Of the 262 subjects who answered both treatment questions, 19 (7.2%) reported parents having been in treatment, and 17 of those had also attended AA or Al-Anon. Ten more parents (3.8%) attended AA or Al-Anon, but had not received treatment. A "yes" to either question classified the student as coming from

a treated family, true for 29 students or 11.1%. Of the 262 students who answered all four distress questions, 26.7% reported distress on at least one item. This is considerably higher than the estimated number of COAs in the population, which some researchers put at 12.5%. Among the 29 students who reported parental treatment, 20 (69%) answered "yes" to at least one distress item, while among the other 233 students, only 50 (21.5%) indicated distress.

Comparing substance use problems among the three groups (the 183 students who did not report any problems; the 50 students who indicated distress but did not report parental treatment; and the 29 students from treated families), the strongest differences throughout the data were between youth from treated families and all other youth. Distress about parental drinking by itself was not associated with the outcomes. There was more substance use by adolescents from treated families, with the differences smaller for tobacco and alcohol and stronger for marijuana and other drugs. These differences were not accounted for by willingness to admit negative information (measured by the PESQ social desirability scale).

The survey also included 22 items measuring other problems besides substance use. Comparing the 29 youth from treated families with all other youth (since distressed youth responses did not differ from youth with no parental problems), youth from treated families reported more delinquency, more visits to an emergency room for substance use problems, more supervision by social service agencies, greater frequency of parents being called to school for students' behavior problems, more eating disorders, more instances of physical abuse by boyfriends among females, and less likelihood of including college in future plans.

The authors conclude that a broad definition of parental drinking problems (i.e., distress about parental drinking) does not identify a group of adolescents who differ markedly from their peers, while the narrower definition of parents in treatment does. This study indicates children of families in treatment to be at highest risk for problems, and the authors suggest targeting this group for more intensive intervention, until some other measure of family alcoholism is shown to be related to such a broad range of outcomes.

Page, R. M. (1993). Perceived physical attractiveness and frequency of substance use among male and female adolescents. *Journal of Alcohol and Drug Education*, 38(2), 81-91.

Research has shown a positive relationship between physical attractiveness and positive peer status in adolescents. This study looked at the relationship between adolescents' perceived physical appearance and substance use behaviors, which are typically socially influenced. The interaction of body weight with perceived attractiveness on substance use was also examined.

The predominantly white sample came from 12 high schools in a northwestern state. Completing the survey were 630 females and 654 males from grades 9-12. Students voluntarily completed a written survey during regularly scheduled health education classes. Ten items assessed use of a variety of substances. Perceived physical attractiveness was measured by response on a scale of 1 (extremely unattractive) to 9 (extremely attractive) to the question, "All in all, how good looking do you think you are?" Students also reported their current weight and height, which were used to determine body mass index (BMI).

Students who rated themselves 1, 2, or 3 were classified as unattractive. Those who gave themselves a 4, 5, or 6 were classified as average looking, and those whose ratings were 7, 8, or 9 were classified as attractive. BMI was used to classify males and females as overweight, normal weight, or underweight.

The variable "illicit drug use" was formed by adding the times during the past month the respondent had used the following: cocaine; marijuana or hashish; LSD, PCP, mescaline, or other hallucinogens; amphetamines; or sedatives. Data were analyzed to determine whether unattractive, average-looking, and attractive males and females differed in substance use frequency; and whether body weight status interacted with perceived physical attractiveness on substance use.

Results showed males rated themselves significantly more attractive than did females. A lower proportion of females (28.3%) rated themselves as attractive than did males (34.0%), and a slightly higher percentage of females (12.2%) than males (11.3%) rated themselves unattractive. For males there were no significant differences in substance use between attractive, average-looking, and unattractive groups, except for smokeless tobacco, with unattractive males

using significantly more per day than average-looking or attractive males did. There were no significant differences between weight groups for males on any of the substance use variables, nor did perceived physical attractiveness significantly interact with weight status on substance use for males.

For females, however, perceived physical attractiveness was significant for use of cocaine; marijuana or hashish; LSD, PCP, mescaline, or other hallucinogens; and amphetamines. Unattractive females were significantly more likely to have used these during the past month than were average-looking or attractive females. Unattractive females used illicit substances a mean of 2.72 times per month, whereas the mean for average-looking females was .44 and for attractive females .64. Perceived physical attractiveness was not significant for alcohol, cigarette, smokeless tobacco, or sedative use among females.

A main effect for weight status was evident only for hallucinogens, with underweight females using them significantly more. Perceived physical attractiveness interacted with weight for use of cocaine; marijuana or hashish; LSD, PCP, mescaline, or other hallucinogens; and amphetamines, with underweight females who perceive themselves as unattractive significantly more likely to use these substances. Unattractive, underweight females used illicit substances a mean of 6.77 times during the past month, much greater than any other female classification group. Unattractive, overweight females used illicit substances a mean of 1.41 times, higher than the rest of the groups but much lower than the unattractive, underweight group.

Study findings indicate a relationship between perceived physical attractiveness and illicit substance use primarily for adolescent females, with females who perceive themselves as unattractive more than four times as likely to use an illicit substance than those who perceive themselves as average-looking or attractive. The author speculates that unattractive females may have a more difficult time gaining acceptance by more attractive peers with higher social peer status, which is often accompanied by more socially conventional behavior. This may lead to affiliation with lower status groups who are at greater risk of socially nonconventional behavior such as illicit sub-

stance use. The combination of being underweight with self-perceived unattractiveness appears to place females at a very high risk of illicit substance use. Perhaps these females rely upon substance use as a way to cope with negative self-concept, while unattractive, overweight females rely more upon food as a coping mechanism. Further research is needed to examine substance use behavior as a coping response to negative emotions arising from perceived unattractiveness and a desire for peer acceptance.

Parish, T. S., & McCluskey, J. J. (1992). The relationship between parenting styles and young adults' self-concepts and evaluations of parents. *Adolescence*, 27, 915-918.

Research over the past fifty years has suggested the strong impact parenting style can have on children's and adolescents' development. Several studies have reported that parental warmth combined with firm discipline lead to strong self-concepts in children and adolescents. This study reexamined the relationship between self-concept and parenting style, and also looked at evaluations of mothers and fathers in relation to their parenting styles.

Subjects were 123 students enrolled in a human development class at a large midwestern university. Age range was 18 to 34 years, with a mean age of 20.9. Participation was voluntary. On seven-point scales students rated the level of restrictiveness vs. permissiveness and the level of warmth vs. hostility for each of their parents. They also reported self-concept and evaluated their mothers and fathers using the Personal Attribute Inventory.

Students' self-concepts varied directly with perceived levels of warmth of both their fathers and mothers, but were not significantly associated with parents' levels of restrictiveness. The significance of parental warmth is in keeping with previous research, but the lack of significance of parental restrictiveness is not. This may be accounted for by the fact that the present study surveyed young adults, while previous studies looked at children and adolescents.

Evaluations of parents showed that fathers' ratings were significantly related to fathers' permissiveness and both mothers' and fathers' warmth, while mothers' ratings were significantly related to mothers' permissiveness and both fathers' and mothers' warmth. The fact that opposite-sex parents' level of warmth correlated with how each parent was evaluated suggests that each parent's actions may have an impact upon how the opposite-sex parent is perceived.

Shannon, D. M., & James, F. R. (1992). Academic intervention for at risk students with substance misusing backgrounds. *Journal of Alcohol and Drug Education*, 38(1), 73-85.

Being at risk academically often extends to factors beyond the school. Drug and alcohol use can interfere with students' academic performance and behavior. This study examined the influence of alcohol and other drug use on student level of risk as measured by class failures, retentions, suspensions, expulsions, placement in special education, and level of participation in extracurricular activities. Three questions were addressed: (1) What academic-related factors were exhibited by students who use alcohol and drugs and those who do not? (2) What interventions are schools providing for students who use alcohol and drugs and those who don't? (3) Are students who use alcohol and other drugs identified as being at greater risk of school failure, and are they therefore receiving more academic interventions?

Data was collected in the fall of 1988 as part of the Phi Delta Kappa national study on "Students at Risk." Information was collected on over 22,000 students from student records and school personnel. For this study, only information collected on tenth-graders was analyzed. From a total of 7,417 tenth-graders, a sample of 696 students was taken. Of these, 348 were identified as substance misusers (SMG), having used both alcohol and other drugs during the 1987-88 school year. A comparison group of nonusers (NSUG), matched on demographics, was then selected. The groups were 70% male, 79% Caucasian, and 59% rural.

Descriptive statistics were calculated for each group on school-related risk factors and reported interventions, and discriminant analysis was used to

determine the relationship of substance-abusing backgrounds to the risk factors and interventions. Data revealed several distinguishing characteristics between the two groups. Thirty-five percent (35%) of the SMG had failed two or more courses, compared to 11% of the NSUG. Twenty-eight percent (28%) of the SMG were retained in a grade at least once compared to 12% of the NSUG, and 42% of the SMG had been suspended compared to 5% of the NSUG. Fifteen (15) SMG students had been expelled, while only one NSUG student had, and SMG students were less likely to participate in extracurricular activities (40% vs. 68%). They were more likely to be referred to special education classes (21% vs. 12%). The five most frequently used interventions for at-risk students were the same for both groups (computerized instruction, extra opportunities for parental involvement, extra basic skills instruction, flexible scheduling, and tutoring). The SMG received more interventions.

This study showed substance-misusing students to be at greater academic risk in spite of receiving more academic interventions. The authors stress the need for coordination, collaboration, and consistency among school personnel working with at-risk learners, and suggest that academic interventions be broadened to target the emotional, social, and psychological effects of alcohol and other drug use. They also recommend increased awareness by educators of outside factors such as alcohol and other drug use that increase academic risk, and that school personnel seek help from outside agencies when appropriate.

**Terre, L., Drabman, R. S., Meydrech, E. F., & Hsu, H. S. H. (1992).
Relationship between peer status and health behaviors.
*Adolescence, 27, 595-602.***

Research over the last ten years has shown a positive correlation between peer-rated popularity/sociability and individual health practices. Self-reported sociability, extensive friendship networks, and peer ratings of sociability have been associated with increased likelihood of drug use, smoking, and participation in sports and exercise. However, these reported associations have come from univariate studies using pairwise comparisons. Given that health behaviors are not totally independent of each other, the authors undertook the present study as a beginning effort to explore from a multivariate perspective the associations among children's multiple health behaviors and sociometric (peer-rated) status.

As part of a larger study, 589 public school students in grades 6-8 during the fall of 1988 were studied. Approximately half the children were male, and 80% were white. Sixty-six percent (66%) lived in nuclear families, 29% in mother-headed households, and 5% in father-headed households. About 84% were categorized in a lower socioeconomic status (SES) based on measures of parent education level and current occupation.

Students supplied demographic information and completed a 35-item questionnaire measuring health behaviors in five areas—exercise, eating, smoking, alcohol use, and stress-related behaviors. Presented with a roster of their classmates, each student rated each peer on a 5-point scale in response to five questions, and a composite score was calculated for each child based on the mean ratings.

Multivariate analysis showed that while demographics significantly increased the predictive power of peer popularity on health habits, the reverse was not true. Popularity in and of itself did not significantly enhance the prediction of the children's health habits over and above demographics. According to the authors these findings, if replicated, point out the limitations of univariate studies on health habits and social status. They suggest that negative health behaviors, even when out of the norm, may not increase risk of ostracism from more conventional classmates. These data suggest positive peer influences may not necessarily be occurring in schools, although the authors note the need for further investigation into whether and how much this finding is specific to a predominantly lower SES sample.

Walsh-Bowers, R. T. (1992). A creative drama prevention program for easing early adolescents' adjustment to school transitions. *Journal of Primary Prevention, 13*, 131-147.

Students in transition often experience social and emotional difficulties. An especially stressful change can be the move from elementary to middle or junior high school. Students at this age are becoming more interested in peer relationships, so developing peer support can facilitate students' transition to a new school environment. This article reports on the use of a creative drama prevention program designed to strengthen peer support through social skill development and affiliation.

The program was piloted with sixth-graders at a rural Canadian junior high school (grades six through eight) during the 1988-89 school year. School staff felt the need for improved support for sixth-graders, many of whom experienced significant distress in adjusting to the academic and social changes they were experiencing. The goals of the small group drama sessions were: (1) to engage students in exploring the creative drama medium; (2) to promote positive peer relations by modeling active listening, giving supportive feedback, and facilitating peer communication; (3) to encourage *group-centered* problem-solving and decision-making; and (4) to build a sense of cohesiveness from successful cooperation. Led by the school counselor, resource teachers, and the author, the sessions were conducted weekly for 21 weeks as part of the language arts curriculum, and all 103 sixth-graders participated.

The drama activities were based on familiar fairy tales. By mid-semester students had adapted to the structured routine which included working in subgroups of four or five students, and the more dramatically and socially adept students freely helped their less confident peers. By the end of the program many groups had combined their subgroups and used more realistic themes, such as classroom conflicts, for their skits. While the group leaders felt the 40-minute sessions were too short and inhibited team-building, student response to the Group Satisfaction Scale (GSS) indicated that overall they were quite satisfied with the experience. Five teachers at the school, comparing the students to previous cohorts of sixth-graders, reported these students were more socially developed in that they appeared less anxious, blended better with children from different feeder schools, offered more support to each other, and were better listeners. At a follow-up meeting, parents completed the Parent

Satisfaction Scale (PSS). Most thought their child was quite pleased with the drama group and had made moderate improvements in social skills since the beginning of the school year. They highly recommended continuing the program for the next year.

The following year (1989-90) the program was shortened to 15 sessions to end before winter break, and a non-equivalent comparison school was used to conduct an outcome evaluation. For both the intervention and comparison groups, students completed the Peer Interaction Scale (PIS) and the School Pressures Scale (SPS), teachers completed the Teacher-Child Rating Scale (T-CRS), and parents completed the Parent Rating of Social Skills (PRSS). Intervention students and their parents also completed the GSS and PSS used in the pilot study.

All the student drama groups ended the program on a highly cooperative note after struggling with performance anxiety, domineering students, and peer conflict. Teacher-leaders tended to be overly directive in early sessions but were encouraged to promote group-centered problem-solving. Responses to the GSS indicated a high degree of satisfaction with the drama groups, and in interviews students expressed confidence in their ability to continue to develop peer relations skills and to deal assertively with peer conflicts. On the self-report measures, however, intervention and comparison students did not differ as expected. Girls from the comparison school showed a significant decrease in school pressures, and boys and girls from both schools improved on the PIS cooperation and conflict scales.

In interviews, teachers from both schools reported continued development of peer relations skills. On the T-CRS Problems scale, teachers rated boys as more problematic than girls, with intervention students less problematic than comparison students. On the T-CRS Competencies scale, boys were rated less competent than girls, with intervention students more competent than comparison students.

Parents completing the PSS indicated their child was quite pleased with the drama groups and highly recommended continuing the program. On the PRSS Problems scale, parents rated girls more problematic than boys, with comparison girls more problematic

than intervention girls (although the difference was not significant). On the PRSS Strengths scale, parents rated girls more competent than boys, with intervention students more competent than comparison students.

Although intervention and comparison students showed similar improvements on self-report measures, intervention students regressed less on teacher ratings and improved more on parent ratings of social strengths. These findings were corroborated in group observations, student interviews, and other parent data. Overall the findings support the usefulness of a social skills program based on creative drama to facilitate student transitions. The author notes the program is competency-based primary prevention targeted at the individual student, and that school systems also need to focus on restructuring school environments to maximize ease of student transitions for adolescents.

Watts, W. D., & Ellis, A. M. (1992). Drug abuse and eating disorders: Prevention implications. *Journal of Drug Education*, 22, 223-240.

Eating disorders have been clinically associated with alcohol and other drug (AOD) abuse among females. Women treated for eating disorders have reported alcohol problems in the range of 20% to more than 50%, while females treated for alcohol abuse have reported eating disorder symptoms in the range of six percent to 30%. The purpose of this study was to investigate the relationship among alcohol and drug use, eating disorders, and depression among adolescent females in order to develop effective education and prevention efforts.

During the fall of 1989, students from grades four through 12 in an affluent suburban school system in Texas were surveyed as part of a drug abuse prevention project. The school district was 99% white/non-Hispanic. For this study, only the data from females in grades seven through 12 were used ($n=826$). The 106-item questionnaire measured lifetime, past year, and past month use of alcohol, marijuana, hallucinogens, designer drugs, cocaine, steroids, amphetamines, barbiturates, and inhalants. Parental and peer attitudes toward AOD use were measured, as well as depression, suicidal ideation, delinquency, and sexual activity.

Eating disorder behavior was not measured directly, but responses to four questions regarding eating and self-image were combined to create an Eating Disorders Risk (EDR) scale, with scores ranging from four to 20. Respondents with scores of 17 to 20 were considered at high risk of developing an eating disorder. The mean score for all grades was 12.12. Thirty-six (36) students, or 4.4% of the respondents, had EDR scores of 20, having answered "always" to all four EDR questions. The percentage of respondents with scores of 17 to 20 almost doubled from ninth to tenth grade, going from 14.7% to 27.2%.

Correlations between frequency of lifetime alcohol use and the EDR were weak but consistent. While EDR scores tended to increase with age, the association with alcohol use was strongest in seventh and eighth grades and grade 11. The association of the EDR with drug use was positive but not as consistent

as that found with alcohol. For seventh and eighth-graders, all measures of amphetamine and inhalant use were correlated with EDR, and for seniors, marijuana use was significantly correlated with EDR.

Suicidal thoughts were consistently related to EDR across all grade levels, as was depression. Depression was also significantly correlated with both alcohol and drug use for almost all grades.

Many of the questions measuring family relationships were not significant for specific grades, but most of them correlated significantly with the EDR at some grade level. For grades seven and eight, feeling unwanted by parents was moderately correlated with EDR, and for ninth graders a composite family drinking and drug use problem score was correlated. For tenth graders (the grade with the highest mean EDR score), the amount of time spent with parents was negatively correlated with EDR. For grades 11 and 12, students who believed their parents knew where they were when away from home had lower EDR scores. The more parents approved of teen drinking, the higher the EDR score. Friends' AOD use was correlated with EDR across grade levels.

In summary, the adolescent females in this study at greatest risk of eating disorders were depressed, having suicidal ideation, and likely to have friends who use alcohol and other drugs. A pattern emerged of seventh and eighth-grade girls turning to a number of addictive behaviors including drug and alcohol use and eating disorders, perhaps because of or in reaction to parental rejection, depression, or peer associations. Implications for prevention strategies include targeting the grades preceding and including the seventh and eighth grades. The data suggest a need for peer prevention groups that include eating disorders as a focus, and school-based interventions dealing with the effects of family dysfunction. Because depression is correlated with both alcohol and other drug abuse and eating disorders, the authors stress the need for more research on the social, family, and peer factors that contribute to depression and those that buffer against it.

About the Southeast Regional Center for Drug-Free Schools and Communities

The position of the U.S. Department of Education is that illicit drug use is wrong and harmful. In accordance with this position, as well as the guidelines set forth by the Department of Health and Human Services (DHHS), the Southeast Regional Center advocates no use for youth. The Center, like DHHS, aims to prevent the use, not just abuse, of alcohol and other drugs by youth and believes all use is abuse when referring to youth under the age of 21.

What is the Center?

The Southeast Regional Center for Drug-Free Schools and Communities is one of five regional centers in a national network established by the U. S. Department of Education through the Drug-Free Schools and Communities Act of 1986. Located at the University of Louisville School of Education in Louisville, Kentucky, the Center serves 12 areas: Alabama, the District of Columbia, Florida, Georgia, Kentucky, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, the Virgin Islands, and West Virginia.

What is the mission of the Center?

Dedicated to support the prevention of alcohol and other drug use among youth in the southeast region, the Center provides the encouragement, knowledge, and expertise needed to implement effective, comprehensive alcohol and other drug (AOD) prevention strategies. The Center offers training, consultation, dissemination of information, and technical support to schools, communities, and states.

The Center:

- Facilitates school/community cooperation by building and supporting planning and action teams
- Assists state educational agencies in coordinating and strengthening alcohol and other drug prevention programming
- Assists colleges and universities and local educational agencies in developing and implementing preservice and inservice training programs for educational personnel
- Evaluates and disseminates information on effective alcohol and other drug prevention programs and strategies

An integrated approach to prevention

The guiding principle of the Center is that planned community-wide action based on cooperation and integration encourages the development of healthy, drug-free youth. Area field coordination is the foundation for Center-assisted planning. Services are geared to meet the unique needs of the southeast region. Each of the 12 areas has a full-time area field coordinator who works with local and state educational agencies, colleges and universities, and school/community teams to develop a prevention plan tailored to the area's particular needs.

Communication is the key

A network made up of a Regional Advisory Council, Area Advisory Committees, and Sub-Area Advisory Committees advises the Center and offers guidance to keep the Center aware of area needs.

Area field coordinators are linked electronically with the Louisville office and with each other, facilitating solid communication among the Center, state and local educational agencies, colleges and universities, and school/community teams.

As a specialty center of the Regional Alcohol and Drug Awareness Resource (RADAR) Network, the Center communicates electronically with state and specialty centers across the country. This offers a broad base for sharing information, and enables the Center to distribute free NCADI (National Clearinghouse for Alcohol and Drug Information) publications.

School/community team building

Area field coordinators work with local educational agencies to initiate school/community planning and action teams. The Center emphasizes coordination at all levels and the development of local plans to meet locally identified needs. Training staff and area field coordinators train school/community teams, share information on promising new prevention models, and offer follow-up services. A continuing relationship between the Center and the teams provides the support and encouragement necessary to create vital, ongoing prevention efforts.

Through initial training and subsequent technical assistance and revitalization, the Center assists school/community teams in developing the process, knowledge, and skills for effective community-based prevention.

Urban initiative

The Center's urban initiative supports AOD prevention efforts in five urban sites in the southeast region: Atlanta, Georgia; Louisville, Kentucky; Memphis, Tennessee; Miami, Florida; and Washington, D.C. Through training, technical assistance, and convening urban advisory committees to support local cooperation and collaboration, the urban initiative is designed to meet the needs of these particular urban populations.

Service to institutions of higher education

The Center encourages colleges and universities to incorporate alcohol and other drug prevention into existing preservice training programs and to become a vital part of the AOD prevention efforts in the communities in which they are located.

Evaluation and dissemination

The Center offers assistance to communities in conducting needs assessments and helps ensure that adequate evaluation techniques are applied to local efforts. Along with training in program evaluation, the Center compiles and disseminates longitudinal data and information about promising prevention strategies.

The Center's dissemination unit produces a variety of publications which focus on prevention including quarterly newsletters, semi-annual research reviews, and grant alerts. The Center also maintains a resource center with curricula, model programs, print and video materials, and articles focusing on special topics in prevention.

University of Louisville School of Education

The University of Louisville is one of the oldest urban universities in the United States. A major state university, it provides a broad range of baccalaureate and advanced degree programs to meet the educational, health care, research, and cultural needs of Kentucky's largest metropolitan area.

The School of Education is responsible for teacher training and prepares professionals for many other school, college, community, and social and public agency positions. It has a longstanding collaborative relationship with school districts in the southeast region.

Southeast Regional Center for Drug-Free Schools
and Communities
Spencerian Office Plaza
University of Louisville
Louisville, Kentucky 40292
(502) 588-0052
Or call toll-free: (800) 621-SERC
FAX: (502) 588-1782

Southeast Regional Center Area Field Coordinators

Alabama

Jean Wallace-Jenkins

SERC
University of Alabama/Birmingham
136-A Ullman Building
Birmingham, AL 35294
(205) 934-8662 Fax: (205) 934-9896

District of Columbia

Vacant

c/o Office of Information, Prevention, Education
2146 24th Place, N.E., Room 165
Washington, DC 20018
(For information or services, please call Richard
Miller at 1-800-621-SERC.)

Florida

Leonard Everett

c/o FL Department of Education
Drug-Free Schools
Florida Education Center, Suite 414
325 West Gaines Street
Tallahassee, FL 32399-0444
(904) 487-8745 Fax: (904) 488-6319

Georgia

Peter Gillespie

c/o State Department of Education
1952 Twin Towers E
Atlanta, GA 30334
(404) 656-2686 Fax: (404) 651-8582

Kentucky

Eddie Woods

SERC
Spencerian Office Plaza
University of Louisville
Louisville, KY 40292
(502) 588-0052 Fax: (502) 588-1782

North Carolina

Peggy Richardson

c/o NCDPI
Alcohol & Drug Defense Section
NC Education Building, Room 6149
301 North Wilmington Street
Raleigh, NC 27601-2825
(919) 715-1747 Fax: (919) 715-2229

Puerto Rico

Lourdes Vazquez

Department of Education
Federal Affairs Office - SERC
G.P.O. Box 190759
Hato Rey, PR 00919-0759
(809) 759-8910 ext. 214 Fax: (809) 754-9289

South Carolina

Stuart Crockett

SCCADA
3700 Forest Drive
Suite 300
Columbia, SC 29204
(803) 734-9740 Fax: (803) 734-9663

Tennessee

Rene Krailo

c/o Tennessee Department of Education
127 Cordell Hull Building
Nashville, TN 37243
(615) 256-6286 Fax: (615) 741-6236

Virginia

Renee' Eidson (AFC Secretary)

SERC, c/o Virginia Department of Education
James Monroe Building, 18th Floor
P.O. Box 2120
Richmond, VA 23216-2120
(804) 225-4429 Fax: (804) 371-2455

Virgin Islands

Allison Petrus

P.O. Box 5665
St. Thomas, VI 00803
(809) 774-0100 ext. 3048
Fax: (809) 774-4679

West Virginia

Roger Tittle

SERC - 2nd Floor
1204 Kanawha Blvd.
Charleston, WV 25301
(304) 345-1766
Fax: (304) 558-0391 (*2 after second ring)



Southeast Regional Center for
Drug-Free Schools and Communities
University of Louisville
Louisville, KY 40292

Bulk Rate
U.S. Postage
Paid
Permit No. 769
Louisville, KY

TECHNOLOGY ASSESSMENT PGM INFO
PO BOX 6000
ROCKVILLE MD 20850